REMARKS

Claims 1-4, 8-57 and 59-61 are pending in the application. Claims 5-7 and 58 have been cancelled. Claims 28-56 have been withdrawn from consideration. Applicants respectfully request reconsideration of the Application.

Rejections Under 35 U.S.C. § 102

Claims 1-4, 14-23, 25, 26 and 57-61 have been rejected under 35 U.S.C. §102(b) as being anticipated by Stover (U.S. Patent 5,759,622). Claim 1 has been amended to recite that the additional metal salt comprises a salt of an alkaline earth metal, boron, iron, tin or a mixture of two or more thereof. Stover fails to disclose an oxidation inhibiting composition comprising the combination of phosphoric acid or an acid phosphate salt, at least on aluminum salt and at least one additional metal salt wherein the metal salt is chosen from a salt of an alkaline earth metal, boron, iron, tin or a mixture of two or more thereof. In view of the amendment to claim 1, Applicants respectfully request that the rejection of claims 1-4, 14-23, 25, 26 and 57-61 under 35 U.S.C. § 102(b) be withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1-4, 14-23, 25, 26, 27 and 57-61 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Stover. The Examiner contends that it would have been obvious to have selected a zinc salt, including zinc chloride or zinc nitrate because such are taught as being equivalents for the same purpose.

As discussed above, claim 1 has been amended to recite that the additional metal salt comprises a salt of an alkaline earth metal, boron, iron, tin or a mixture of two or more thereof. Stover fails to disclose an oxidation inhibiting composition comprising the combination of phosphoric acid or an acid phosphate salt, at least on aluminum salt and at least one additional metal salt wherein the metal salt is chosen from a salt of an alkaline earth metal, boron, iron, tin or a mixture of two or more thereof. It would not have been obvious to use any of the recited metal salts based on the teachings of Stover. In view of the amendment to claim 1, Applicants respectfully request that the rejection of claims 1-4, 14-23, 25, 26, 27 and 57-61 under 35 U.S.C. § 103(a) be withdrawn.

Claims 8-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Stover in view of Block (U.S. Patent 4,454,193). The Examiner contends that although Stover fails to teach a method wherein the oxidation inhibiting composition comprises the combination of phosphoric acid or an acid phosphate salt, at least one aluminum salt and at least one additional salt comprising an alkaline earth metal salt, it would have been obvious to modify the oxidation inhibiting composition of Stover by employing an additional metal salt that comprises magnesium nitrate in place of the zinc salt because Block teaches that zinc and magnesium are preferred multi-valent cations for producing carbon-metal phosphate composites that are especially resistant to oxidation at elevated temperatures.

Applicants respectfully disagree with the Examiner's contention. Claim 1 has been amended to recite that the oxidation inhibiting composition is resistant to moisture sensitivity and reduces the treated carbon-carbon composite's sensitivity to reduction in friction. Block is directed to a carbon-metal phosphate composite having an improved resistance to oxidation at elevated temperatures and a decreased coefficient of friction. The impregnating solution of Block contains a non-ionic organophosphorus ester and a metal salt that reacts with the organophosphorus ester to provide a metal-organophosphorus salt. Block teaches that compositions formed from phosphoric acids or phosphate salts are undesirable and pose several problems for use as impregnants for carbon bodies (col. 1, lines 37-41). Block's solution to this problem is non-ionic and provides an organophosphorous ester that is free of acid groups or the corresponding salts thereof (col. 4, lines 50-51). Thus Block explicitly teaches away from compositions that combine metal cations (or their salts) with phosphorous acid and/or metal phosphates. Furthermore, the impregnating solution of Block produces a composite having decreased coefficient of friction (col. 1, lines 7-10; col. 2, lines 57-60; col. 4, lines 27-31). Due to the decreases coefficient of friction, the composites of Block are especially useful in seals, bearings, rotors and other moving engine parts (col. 6, lines 31-35). The composites of the present invention, on the other hand, are useful in aircraft brakes, where a high coefficient of friction is required. The carbon-carbon composites treated with the inventive method exhibit improved oxidation resistance and exhibit less sensitivity to reduction in friction as a

result of moisture absorption from the atmosphere. Therefore, when considering the references as a whole, a person skilled in the art would not simply choose from the metals of the metal-organophosphorus salts disclosed by Block and substitute those for the zinc salt in the phosphoric acid containing composition of Stover. Consequently, it would not have been obvious to modify the composition of Stover based on the teachings of Block. Applicants request that the rejection of claims 8-13 under 35 U.S.C. § 103(a) based on Stover in view of Block be withdrawn.

The Examiner rejected claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Stover in view of Galasso et al. (U.S. 4,425,407). The Examiner contends that although Stover fails to disclose the method wherein the barrier coating is formed by reacting the carbon-carbon composite with molten silicon, it would have been obvious to have modified the method taught by Stover by reacting the carbon-carbon composite with molten silicon as taught by Galasso et al. because Galasso et al. teaches that such a method is well known in the art.

Applicants respectfully traverse this rejection. As described above, Stover does not teach or suggest all the features of claim 1. Specifically, Stover does not disclose an oxidation inhibiting composition comprising the combination of phosphoric acid or an acid phosphate salt, at least on aluminum salt and at least one additional metal salt wherein the metal salt is chosen from a salt of an alkaline earth metal, boron, iron, tin or a mixture of two or more thereof. Claim 24 depends from claim 1. Galasso does not make up for deficiencies of Stover. Thus, even if the method of Stover were modified by the teaching of Galasso with regard to the barrier coating, the resulting method would not be the method of claim 24. Accordingly, Applicants respectfully request that the rejection of claim 34 under 35 U.S.C. § 103(a)be withdrawn.

CONCLUSION

In view of the foregoing amendment and remarks, Applicants respectfully submit that the application is in condition for allowance. A notice of allowance is respectfully requested for claims 1-4, 8-57 and 59-61.

In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 under Attorney Docket No. **GRCBP0317USA**.

Respectfully submitted,
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